Claim 1. A method for implementing a segmentation addressing operation comprising the steps of:

providing a first logical address and a segment,

deriving a linear address from the logical address and the segment in a first discrete sub-step in which the properties of a logical address are checked to determine whether those properties are consistent with the criteria for addressing the segment, and

performing a base add operation to determine the linear address in a second discrete sub-step.

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Claim 2. A method for implementing a segmentation operation comprising the steps of:

providing a first segment selector for deriving a linear address of a segment descriptor in a first descriptor table,

providing a second segment selector for deriving a linear address of a segment descriptor in a second descriptor table,

attempting an access of the first descriptor table to derive a segment descriptor,

attempting an access of the second descriptor table to derive a segment descriptor if the access of the first descriptor table fails, and

storing a derived segment descriptor from a successful attempted access in a descriptor register.

Claim 3. A method as claimed in Claim 2 in which any attempt to access is divided into discrete sub-steps comprising:

checking properties of a logical address to determine whether those properties are consistent with the criteria for addressing a first descriptor table in a first discrete sub-step of deriving a linear address, and

performing a base add operation to determine the linear address as a second discrete sub-step of deriving a linear address.